Unit Two - Insect Evolution
Study Guide

Lesson Objectives

By the end of the unit you should be able to:

- Describe the four successive stages of insect evolution
- Define ametabolous, hemimetabolous and holometabolous, and the similar terms regarding wing development
- Describe the two theories of insect wing evolution and why it is difficult to explain how insects evolved their wings.

Introduction
Metamorphosis terms

Differentiate between ametabolous, hemimetabolous, and holometabolous.

Type of metamorphosis	Definition	Insects that do this
ametabolous		
hemimetabolous		
holometabolous		

Evolutionary Stages

Apterygota

- What does "apterygote" mean?

- Describe this stage and which insects represent this group.

Paleopterous

- What does "paleopterous" mean?

- What is another term used to describe this stage?

- Describe this stage and which insects represent this group.

- What are some of the advantages wings and flight provide?

Wing Flexon

- What does "neopterous" mean?
- Describe this stage and which insects represent this group.
- How was this stage an advantage over the previous stages?

Complete Metamorphosis

- Describe this stage and which insects represent this group.
- Why are insects in this group so successful?

Wing Evolution/ Adaptation **ASSIGNMENT**

Write a brief essay for your journal (**no more than one-page**) supporting one hypothesis over the others. Title your journal entry, "Wing Evolution Project."

NOTES: